

**II. Remarks*****Status of Claims***

By this paper, Applicant is amending claims 1, 10 (withdrawn), 13-14 (withdrawn), 19, 23 (withdrawn), and 32-36 (withdrawn). Therefore, after entering this amendment, claims 1, 3-6, 9, 19, 22, 29, and 30 are currently pending. Withdrawn method claims 10 and 14, and – thereby – their dependent claims, are amended herewith to depend from and include all structural limitations of claim 1.

No new matter is added by any amendment herein. Reconsideration and further examination of this application in view of the above amendments and the following remarks is therefore respectfully requested.

***Examiner Interview***

Applicant thanks the Examiner for taking time to interview this case on August 10, 2010. The art of record was discussed in view of the claims, as was the rejection under § 112¶1 and the Examiner's interpretation of the claims and the cited art. Agreement was reached that defining "the entire length" of the guidewire as being from its proximal end to its distal end would differentiate the claimed structure over the art of record because the art of record does not teach a guidewire with a lumen that is open and unoccupied for substantially its entire length (US4748986 teaches against displacement or removal of its core element (12/32) occupying a central lumen, which is secured by a safety wire (17/34); US5993424 teaches against anything other than a small linear mobility of its core element occupying a central lumen). The present amendments address both of these items. Applicant acknowledged that, in spite of this differentiation over the art of record, the Examiner will conduct a further search upon entry of the presently-submitted amendments.

***Claim Rejections – 35 U.S.C. § 103***

Citing 35 U.S.C. § 103(a) the Office Action rejected claims 1, 4, 5, 9, 19, and 22 and as being obvious over Morrison (US4748986) in view of Lorenzo (US5993424).

Pursuant to the discussion during the Examiner Interview, the independent claims have been amended to clarify that, for the “an open lumen that is unoccupied for substantially its entire length,” where the “entire length” is the length from the proximal to the distal end of the guidewire. Morrison does not include an open lumen that is unoccupied for substantially its entire length. Indeed, Morrison teaches against just such a feature. The central space of Morrison’s wire coil 13 is occupied by a solid metallic flexible elongate element 12, which “extends almost the entire length of the floppy wire guide 11” (column 2, lines 30-33). As is shown in FIGS. 1-5 and described at column 3, lines 33-49; column 4, lines 3-9; 44-55, Morrison requires a “safety ribbon 17/34,” which is securely attached between the core-filling element 12/32 and the distal tip 18/36. This attachment is taught as a safety feature, securing the tip to the elongate element in case the tip becomes dislodged from the coil surrounding the elongate element. As such, modifying Morrison in a manner removing the core element 12/32 would render the Morrison device unsafe and inoperable for its intended use. “The claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose.” See MPEP § 2143.01.

Likewise, Lorenzo does not include an open lumen that is unoccupied for substantially its entire length, and also teaches against it. Lorenzo’s device includes a central lumen occupied by a core wire 60. The core wire can slide between a retracted position and an extended position (cf. column 4, lines 12-27 and FIGS. 3-4). However, the core wire cannot be withdrawn to leave the lumen open for substantially its entire length. As shown, for example, in FIG. 1, the outer tube body 20 has a reduced-diameter portion 28 as a means for preventing removal of the core wire from the outer tube. As shown in FIGS. 1, 3, 4, and 5, the core wire 60 includes a distal outer diameter that is sufficiently large to prevent it from passing proximally past the reduced-diameter portion 28, even when the core wire is in its “retracted position.” (See

column 4, lines 35-47). Thus, Lorenzo expressly teaches against a removable core element that would leave a lumen open for substantially the entire device length, and its device would be rendered “too floppy” and therefore inoperable., because it relies upon the core element for proper pushability, trackability, and steering.

***Claim Rejections – 35 U.S.C. § 112***

Citing 35 U.S.C. § 112¶1 the Office Action rejected claims 1, 3-6, 9, 19, 22, and 29-30 as failing to comply with the written description requirement. The Office Action alleges, and the Examiner reiterated during the Interview, that the specification as originally filed does not provide written description to support the open-ended limitation of “at least four wound coils” with reference to a longitudinal portion having a substantially constant diameter, as such a limitation could theoretically be boundless.

Applicant respectfully traverses this rejection. In the mechanical arts – particularly an art as well-known and able to be predicted as the forming of cable tubing, those having skill in the art would understand the lower limit of the range “at least four wound coils” to be four coils. However, they would not see the upper end of that range as being infinity or some impracticably large number. As ruled by the U.S. Court of Appeals for the Federal Circuit, “open-ended claim [are] limited by what a person skilled in the art would understand to be workable.” *Ralston Purina Co. v. Far-Mar-Co, Inc.*, 772 F. 2d 1570, 1577 (Fed. Cir. 1985). In that case, the Court held an open-ended limitation to meet the written description requirement and to be supported by the specification.

In the present application, the drawing figures show embodiments having a constant outside diameter over three, four, five, six, and eleven coils (FIGS. 4, 32), and the specification provides written description of embodiments having two to twelve wires (see, e.g., paras. [0012] and [0050], the latter of which specifies that this structure provides for a very precise outer diameter). For at least these reasons, Applicant respectfully submits that the rejected claim limitation of “at least four” is supported by adequate written description, and would not be understood by those of skill in the art as an impractically or unsupported boundless limitation – because those of skill in the art

will have sufficient description and enablement to construct the claimed device. Accordingly, Applicant respectfully requests that the rejection be withdrawn.

Each of the independent claims is distinguished from the art of record. Therefore, each of the pending dependent claims is allowable for at least the reasons discussed above. Accordingly, Applicant respectfully requests that the rejection be withdrawn and these claims recognized as being in condition for allowance (including rejoinder of the withdrawn claims, which include all of the same limitations).

***Conclusion***

In view of the above amendments and remarks, it is respectfully submitted that the present claims are patentably distinguishable over the art of record and that this application is now in condition for allowance, including that Applicant requests rejoinder of the withdrawn claims. The Examiner is invited to contact the undersigned attorney for the Applicant via telephone number (312) 222-8104, if such communication would expedite this application.

Respectfully submitted,

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